Department of Defense

INSTRUCTION

SUBJECT: Development and Management of Interactive Courseware (ICW) for Military Training

References: (a) DoD Directive 1322.18, "Military Training," January 9, 1987
　　　　　　 (b) MIL-STD-1379D, "Military Training Programs," December 5, 1990
　　　　　　 (c) DoD Directive 5124.2, "Assistant Secretary of Defense (Force Management and Personnel)," January 26, 1990
　　　　　　 (d) DoD Directive 5040.2, "Visual Information (VI)," December 7, 1987
　　　　　　 (e) through (r), see enclosure 1

1. PURPOSE

This Instruction:

1.1. Establishes DoD policy, assigns responsibilities, prescribes procedures, and establishes information requirements for the development and management of interactive courseware (ICW) for training military personnel.

1.2. Establishes the DoD Advisory Group on Interactive Courseware. (See enclosure 2.)

1.3. Supplements reference (a) to promote cost-effective military training and provide guidance for the development, management, and efficient distribution of ICW programs that are readily portable to all potential users.

2. APPLICABILITY AND SCOPE

This Instruction:

2.1. Applies to the Office of the Secretary of Defense (OSD); the Military Departments, including their National Guard and Reserve components; the Chairman of the Joint Chiefs of Staff and the Joint Staff; the Unified and Specified Commands; the Inspector General of the Department of Defense (IG, DoD); and the Defense Agencies (hereafter referred to collectively as "the DoD Components").

2.2. Applies to all ICW developed by or for the Department of Defense, including ICW programs developed in conjunction with weapon system acquisition.

2.3. Excludes full-scale simulators, part-task training devices in which actual equipment or simulated equipment not integral to the courseware is required for program performance, and computer-controlled training capabilities embedded in actual equipment.

3. DEFINITIONS

The terms used in this Instruction are defined in enclosure 3.

4. POLICY

It is DoD policy that:

4.1. All ICW programs shall be designed to promote portability, and shall comply with the standard DoD programming protocols and other technical requirements prescribed in MIL-STD-1379D (reference (b)) and enclosure 4.

4.2. The Government shall not agree to pay royalties, recurring license or run-time fees, use tax, or similar additional payments for courseware, associated presentation programs necessary to interpret and execute the courseware, documentation, or associated training materials for ICW programs developed for or by the Department of Defense.

4.3. An inventory of ICW programs shall be maintained in the Defense Instructional Technology Information System (DITIS). This inventory shall be queried before the development of a new ICW program to determine if a program exists in the inventory that can be used or cost-effectively modified to meet new training needs.

4.4. Reproduction master materials shall be archived for the life cycle of each

ICW program.

    4.5. The DoD Components shall ensure the availability of all materials necessary to modify ICW courseware throughout the life cycle of the ICW program.

5. <u>RESPONSIBILITIES</u>

    5.1. The <u>Assistant Secretary of Defense (Force Management and Personnel)</u>, under DoD Directive 5124.2 (reference (c)), shall:

        5.1.1. Provide overall ICW policy and program review.

        5.1.2. Serve as the proponent for training standards and specifications.

        5.1.3. Coordinate ICW requirements with the Assistant Secretary of Defense for Command, Control, Communications, and Intelligence (ASD(C3I)) and the Assistant Secretary of Defense (Public Affairs) (ASD(PA)), as necessary.

        5.1.4. Chair the DoD Advisory Group on Interactive Courseware.   (See enclosure 2.)

        5.1.5. Monitor the implementation and effectiveness of policies for ICW activities.

    5.2. The <u>Assistant Secretary of Defense (Public Affairs)</u>, consistent with DoD Directive 5040.2 (reference (d)), shall:

        5.2.1. Provide overall visual information (VI) policy and objectives.

        5.2.2. Coordinate VI standards with the ASD(FM&P) and the ASD(C3I), as necessary.

        5.2.3. Provide qualified representation to the DoD Advisory Group on Interactive Courseware.

    5.3. The <u>Assistant Secretary of Defense (Production and Logistics)</u>, under DoD Instruction 5000.2 (reference (e)), shall:

        5.3.1. Ensure that policies, procedures, and standards governing management of integrated logistic support (ILS) for systems and equipment are consistent with ICW policies.

5.3.2. Ensure that training standards and specifications for weapon systems are developed under the ILS Standardization Program and are fully coordinated with the acquisition and training communities.

5.3.3. Provide representation to the DoD Advisory Group on Interactive Courseware.

5.4. The Assistant Secretary of Defense for Command, Control, Communications, and Intelligence, consistent with DoD Directives 5137.1, 3305.2, 5160.4, and 5210.70 (references (f) through (i)), shall:

5.4.1. Provide overall information management policy and objectives.

5.4.2. Coordinate information management standards with the Assistant Secretary of Defense (Force Management and Personnel) (ASD(FM&P)) and the ASD(PA), as necessary.

5.4.3. Provide overall policy and guidance for intelligence training programs, including intelligence-related foreign language training.

5.4.4. Develop and issue appropriate guidance to the intelligence training community for reporting and sharing ICW programs and related information.

5.4.5. Provide qualified representation to the DoD Advisory Group on Interactive Courseware.

5.5. The Assistant Secretary of Defense (Reserve Affairs), consistent with DoD Directive 5125.1 (reference (j)), shall:

5.5.1. Provide overall Reserve training policy and objectives.

5.5.2. Provide qualified representation to the DoD Advisory Group on Interactive Courseware.

5.6. The Assistant Secretary of Defense (Health Affairs), consistent with DoD Directive 5136.1 (reference (k)), shall:

5.6.1. Provide overall policy and objectives for training programs for healthcare personnel.

5.6.2. Provide qualified representation to the DoD Advisory Group on

Interactive Courseware.

5.7. The <u>Chairman of the Joint Chiefs of Staff</u>, consistent with 10 U.S.C. 151 (reference (l)), shall:

5.7.1. Provide overall policy and objectives for joint training.

5.7.2. Provide qualified representation to the DoD Advisory Group on Interactive Courseware.

5.8. The <u>Director, Defense Logistics Agency</u>, consistent with DoD Directive 5105.22 (reference (m)), shall develop, operate, and maintain the DITIS.

5.9. The <u>Heads of the DoD Components</u> shall:

5.9.1. Implement ICW policy and procedures consistent with this Instruction and other applicable DoD policy.

5.9.2. Provide ICW information to the ASD(FM&P) and the ASD(PA), as required.

5.9.3. Interface with and support other activities and DoD Components in sharing ICW materials.

5.9.4. Provide qualified representation to the DoD Advisory Group on Interactive Courseware, and assign appropriate and qualified Component representation to the working groups as directed.

5.9.5. Plan, program, and budget for their ICW requirements.

5.9.6. Provide life-cycle management (LCM) for their ICW programs.

5.9.7. Ensure that data entered into the DITIS are complete, current, and accurate.

6. <u>PROCEDURES</u>

6.1. <u>Development</u>

6.1.1. The decision to use ICW shall be based on a comprehensive analysis of the total training system requirements, and a media selection analysis to determine if

the use of ICW is an effective and efficient means for presenting training materials when compared with other potential training media.   The DoD Components shall ensure that these analyses are performed and the results documented in accordance with DoD Directive 1322.18 (reference (a)) and MIL-STD-1379D (reference (b)).

6.1.2. A review of the DITIS courseware inventory shall be made following requirements definition and before ICW program development or acquisition to determine what existing products meet or can be cost-effectively modified to meet new training needs.

6.1.3. Prototype ICW programs shall be validated in the actual training environment using a sample representative of the target trainee population, including the Reserve components, as applicable.   Discrepancies in the design, including courseware content and associated software, shall be corrected, and the system retested and verified before acceptance, distribution, and use.

6.1.4. The DoD Components shall evaluate the training effectiveness of all ICW programs and document the results of the evaluations in accordance with reference (b).   Evaluations shall identify lessons learned and the extent to which specified training objectives and performance goals are met.

6.1.5. The DoD Components shall obtain, to the extent authorized by the FAR (reference (n)), unlimited rights or Government-purpose license rights to the courseware, associated presentation programs necessary to interpret and execute the courseware, documentation, and associated training materials for all ICW programs developed for or by the Department of Defense.   These rights shall include the royalty-free rights to use, duplicate, and disclose data for Government purposes and to permit others to do so for Government purposes.

6.1.6. All ICW programs developed for or by the Department of Defense shall comply with the standard DoD programming protocols and other technical requirements in reference (b) and enclosure 4.   In addition, when special purpose software (e.g., simulation models, unique device drivers, or course management features not supported by the authoring system) is developed for an ICW program, the procedures and requirements of DoD-STD-2167A (reference (o)) shall be followed.

6.1.7. Logistic support packages and comprehensive documentation for operation and maintenance shall be developed or acquired for all ICW programs in accordance with DoD Instruction 5000.2 (reference (e)).

6.1.8. ICW programs that are classified as audiovisual (AV) productions or VI products also shall follow the procedures of DoD Directive 5040.2 (reference (d)) and OFPP Letter 79-4 (reference (p)).

6.2. <u>Management</u>

6.2.1. Each ICW program shall be assigned to a DoD Component-designated activity for life-cycle management (LCM).   This activity shall be responsible for maintenance of courseware, associated materials, documentation, and administrative records.   The activity shall control these items throughout their life cycles, and dispose of them in accordance with 36 C.F.R. 1232 and 1228 (reference (q)).   The LCM activity shall ensure that:

6.2.1.1. A record copy and reproduction master materials for all assigned ICW programs shall be retained throughout the program life cycle.

6.2.1.2. An executable circulation copy of all assigned ICW courseware--including associated presentation programs necessary to interpret and execute the courseware, support software, and user documentation--shall be retained for the life cycle of the program for review by requesting activities and organizations to determine the program's applicability to their training requirements.

6.2.2. The DoD Components shall ensure the life-cycle availability of the version of the authoring program, assembly language, or higher order language (HOL) compiler used to develop the courseware; source code for the courseware; concomitant documentation; all associated software libraries; and all other materials necessary and sufficient to modify the courseware.

6.2.2.1. If these materials are acquired as part of the ICW procurement or are developed using Government authoring tools, a copy shall be archived throughout the life cycle of the ICW program.

6.2.2.2. If these materials are not acquired as part of the ICW procurement, the DoD Components shall require the contractor to archive, escrow with a third party, or otherwise ensure their availability throughout the life cycle of the ICW program.

6.2.3. Life-cycle management of ICW programs that are classified as AV productions or VI products also shall follow the procedures in DoD Directive 5040.2 (reference (d)).

7. <u>INFORMATION REQUIREMENTS</u>

    7.1. Information regarding all nonintelligence-related ICW programs--up to and including the "Secret" classification level--shall be reported to the Defense Training and Performance Data Center, Defense Logistics Agency, and maintained in the DITIS in accordance with enclosure 5.   These reporting requirements complement but do not supplant the report requirements of the Defense Automated Visual Information System (DAVIS) in DoD Directive 5040.2 (reference (d)).

    7.2. Requirements analysis and training effectiveness evaluation reports for all nonintelligence-related ICW programs--up to and including the "Secret" classification level--shall be submitted through command channels to the Defense Technical Information Center (DTIC), Defense Logistics Agency, within 30 days of report completion.

    7.3. Information and reports regarding intelligence-related ICW programs shall be reported and maintained following the guidance of the ASD(C3I).
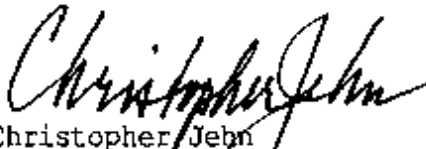
    7.4. The information requirements in subsections 7.1. through 7.3., above, are exempt from licensing in accordance with paragraph E.4.b. of DoD 7750.5-M (reference (r)).

    7.5. When a notice of a proposed ICW procurement is published in the "Commerce Business Daily" (CBD), it shall be provided for inclusion under the section entitled "Training Services" or the section entitled "Training Aids and Devices."   Upon contract award, the acquisition activity shall announce in the CBD, under the same section, the contract title, the contractor name, and the total contract cost.

8. <u>EFFECTIVE *DATE*</u>

This Instruction is effective *immediately.*

Christopher Jehn
Assistant Secretary of Defense
(Force Management and Personnel)

Enclosures - 5
    E1. References, continued
    E2. DoD Advisory Group on Interactive Courseware
    E3. Definitions
    E4. Interim Standards for Interactive Courseware
    E5. Defense Instructional Technology Information System (DITIS) Report
       Requirements

E1. ENCLOSURE 1

REFERENCES, continued

(e) DoD Instruction 5000.2, "Defense Acquisition Management Policies and
    Procedures," February 23, 1991

(f) DoD Directive 5137.1, "Assistant Secretary of Defense for Command, Control,
    Communications, and Intelligence," March 27, 1990

(g) DoD Directive 3305.2, "DoD General Intelligence Training," July 20, 1984

(h) DoD Directive 5160.41, "Defense Language Program (DLP)," April 7, 1988

(i) DoD Directive 5210.70, "DoD Cryptologic Training," November 3, 1980

(j) DoD Directive 5125.1, "Assistant Secretary of Defense (Reserve Affairs)," January
    12, 1984

(k) DoD Directive 5136.1, "Assistant Secretary of Defense (Health Affairs)," January
    27, 1989

(l) Section 151 of title 10, United States Code

(m) DoD Directive 5105.22, "Defense Logistics Agency (DLA)," December 6, 1988

(n) Federal Acquisition Regulation (FAR), current edition

(o) DoD-STD-2167A, "Defense System Software Development," February 29, 1968

(p) Office of Federal Procurement Policy (OFPP) Letter 79-4, "Contracting for
    Motion Picture Productions and Videotape Productions," November 28, 1979

(q) Title 36, Code of Federal Regulations, Chapter 12, "National Archives and
    Records Administration," Parts 1232 and 1228

(r) DoD 7750.5-M, "DoD Procedures for Management of Information Requirements,"
    November 1986, authorized by DoD Directive 7750.5, August 7, 1986

E2. ENCLOSURE 2

DoD ADVISORY GROUP ON INTERACTIVE COURSEWARE

E2.1.1. The primary purpose of the DoD Advisory Group on Interactive Courseware is to monitor and update ICW standards to keep them current with advances in technology.

E2.1.2. The Advisory Group shall advise and assist the ASD(FM&P) on ICW policy, planning, management, and standards.

E2.1.3. The Advisory Group is a permanent body chaired by the Office of the Assistant Secretary of Defense (Force Management and Personnel) (OASD(FM&P)), and consists of a representative from each of the following offices:

E2.1.3.1. Assistant Secretary of Defense (Force Management and Personnel)

E2.1.3.2. Assistant Secretary of Defense (Public Affairs)

E2.1.3.3. Assistant Secretary of Defense (Production and Logistics)

E2.1.3.4. Assistant Secretary of Defense for Command, Control, Communications, and Intelligence

E2.1.3.5. Assistant Secretary of Defense (Reserve Affairs)

E2.1.3.6. Assistant Secretary of Defense (Health Affairs)

E2.1.3.7. Chairman of the Joint Chiefs of Staff

E2.1.3.8. Secretaries of the Military Departments

E2.1.3.9. Directors of the Defense Agencies

E2.1.4. The Advisory Group shall meet semi-annually, or as required by the Chair.

E2.1.5. Working groups shall be instituted by the Chair as required.

E3. ENCLOSURE 3

DEFINITIONS

E3.1.1. Courseware.   Training materials, including the curriculum database and all disks, tapes, books, charts, and computer programs necessary to deliver a complete ICW program.   Courseware includes special applications programs and other software necessary to interpret and execute an ICW program.

E3.1.2. Embedded Training.   Training provided by capabilities not specifically required for mission completion, but that are built into or added onto operational systems, subsystems, or equipment to enhance or maintain user skill proficiency.

E3.1.3. Full-Scale Simulator.   A training device that simulates the salient features of the equipment and environment for all major tasks for a particular mission on a given system.

E3.1.4. Interactive Courseware (ICW).   Computer-controlled courseware that relies on trainee input to determine the pace, sequence, and content of training delivery.

E3.1.5. Interactive Courseware (ICW) Program.   An assembly or series of closely related ICW lessons and concomitant training materials and documentation that are grouped together under a single identification number.   An ICW program comprises one or more lessons (i.e., segments of instruction designed to teach one or more training objectives) that may be grouped into separate modules that can be taught, measured, and evaluated as a single unit.

E3.1.6. Part-Task Training Device.   A device that permits selected aspects of a task to be practiced independently of other elements of the task.   The purpose of a part-task training device is to provide economical training on specified task elements requiring special practice, but that are not dependent upon the total equipment.

E3.1.7. Portability.   The capability to run courseware and associated application programs without modification on a delivery system other than the one for which they were originally designed.

E3.1.8. Reproduction Master Materials.   The materials necessary to reproduce or modify all components of the ICW courseware, including all video and audio source materials as originally supplied to the mastering facility.   Reproduction master materials also include the appropriate associated development documentation

necessary to reproduce or modify the ICW courseware (e.g., flow charts, scripts and storyboards cross-referenced to the video shot list, edit decision list).

E4. ENCLOSURE 4

INTERIM STANDARDS AND PRACTICES FOR INTERACTIVE COURSEWARE

E4.1.1. The following are interim standards for the development and procurement of ICW courseware and associated delivery systems.

E4.1.1.1. Graphics.   Developmental ICW programs and associated hardware shall be compatible with the standard Video Graphics Array (VGA) family, Color Graphics Adapter (CGA), or Extended Graphics Adapter (EGA) at the read-only memory and basic input/output system (ROM-BIOS) levels.

E4.1.1.2. Interactive Videodisc (IVD).   ICW developments and procurements incorporating IVD shall be based on the LaserVision standards for optical videodisc.

E4.1.1.3. Digital Information.   Regardless of the format used to deliver ICW, a record copy of all ICW courseware and modifications shall be prepared and stored by the Component in a format that is readily accessible to other potential users. All digital information (e.g., ICW control programs, graphics text files) in the record copy shall be stored using the operating system standard directory structure, allowing digital information to be transferred using standard operating system utilities.   All analog information in the record copy (e.g., source video and audio used in the ICW program) shall be stored using conventional storage media, and shall be of such quality that it is usable for reproduction.   For example, Components delivering ICW entirely on videodisc would prepare a record copy of the ICW courseware using digital media such as magnetic disk or magnetic tape to store the digital information, and analog media such as videotape or audio tape to store the analog information.

E4.1.1.4. Existing ICW Programs.   ICW programs already developed or under development shall be made compliant with this Instruction if economically feasible, or phased out at the end of their useful lives.   In addition, all existing programs shall comply with the DITIS reporting requirements in subsection 7.1., above, of this Instruction.

Existing programs that require the Government to pay royalties, recurring license or run-time fees, use tax, or similar additional payments for courseware, associated presentation programs necessary to interpret and execute the courseware, documentation, or associated training materials developed for the Department of

Defense shall be made compliant with subsection 4.2., above, of this Instruction at the most advantageous time for renegotiation of that contract clause.

E5. ENCLOSURE 5

DEFENSE INSTRUCTIONAL TECHNOLOGY INFORMATION SYSTEM (DITIS)
REPORT REQUIREMENTS

E5.1.1. The purpose of the DITIS is to facilitate resource sharing within the DoD Components.   To accomplish this, the DITIS database provides an automated, on-line catalog of interactive courseware (ICW) programs used in military training.   In addition, it provides information on all DoD-owned ICW programs, whether fielded or under development.   This central source of information is designed to give ICW planners and developers a means to more efficiently use existing DoD ICW resources to meet training requirements.

As required by this Instruction, the DITIS database shall be accessed several times over the life cycle of an ICW program, whether the program is acquired through in-house development or under contract, uses commercially available off-the-shelf courseware, or involves resource sharing among the Components.   Specifically, interaction with DITIS is required at the following points during the life cycle of an ICW program:

E5.1.1.1. Proposed Development.   As part of the requirements definition process, but before the decision to develop or fund the ICW program, the DITIS database shall be queried to determine what existing products meet or can be cost-effectively modified to meet the training requirements.   At this time, Sections A and B of the DITIS form (attachment E5.A1.) shall be completed.

E5.1.1.2. Under Development.   Within 30 days following Component-approval to develop or fund the ICW program procurement, the originating activity shall input updated program information into the DITIS database.   At this time, Section C of the DITIS form (attachment E5.A1.) shall be completed, and Sections A and B revised as necessary.

E5.1.1.3. Development or Acquisition Completed.   Within 30 days following completion of ICW program development or acquisition, the DITIS record for the program shall be updated to reflect the final program characteristics and the program source.   At this time, Sections D, E, and F of the DITIS form (attachment E5.A1.) shall be completed, and Sections A, B, and C revised as necessary.

E5.1.1.4. Program Revision.   The DITIS record shall be updated to reflect

any major changes or additional data regarding the ICW program, such as program modification or addition or deletion of a module or lesson, within 30 days of any such revision or new data.

E5.1.1.5. <u>Program Termination</u>. The DITIS record shall be updated to indicate program termination, removal from service, or similar change in status within 30 days of any such change.

In addition, the DITIS database may be accessed as part of the requirements definition process or at any other time information on existing or planned ICW programs is desired.

Data entry may be performed in either of two ways: Automated or manual. To facilitate automated data entry, a package consisting of a diskette with the data entry programs and screens, data entry instructions, and a user's guide is provided to each developing activity. Automated data entry is accomplished using this package on a local DOS-based personal computer.

Data submission may also be accomplished manually. For those Agencies without access to the equipment necessary for automated input, the information requested on the DITIS form (attachment E5.A1.) is entered and submitted to the Defense Training and Performance Data Center in accordance with the DITIS user's guide.

Attachments - 2
E5.A1. DITIS Report Form
E5.A2. Definitions of Data Elements for DITIS Report Form

E5.A1. ATTACHMENT 1 TO ENCLOSURE 5

DITIS Report Form, DD Form 2568, JAN 91

DEFENSE INSTRUCTIONAL TECHNOLOGY INFORMATION SYSTEM (DITIS) REPORT

SECTION I - ADMINISTRATIVE INFORMATION

1. DATE (YYYYMMDD)	2. DITIS RECORD NUMBER	3. INTERACTIVE COURSEWARE (ICW) PROGRAM STATUS (Enter appropriate code)
		Q Query Only R Program Revision O Other (Specify) P Proposed Development S Out of Service U Under Development T Program Terminated C Development or Acquisition Completed

4. ORIGINATING ACTIVITY

a. ORGANIZATION NAME	b. OFFICE SYMBOL

c. POINT OF CONTACT (POC) NAME (Last, First, Middle Initial)	d. TELEPHONE NUMBER (Include Area Code)	
	(1) Commercial	(2) AUTOVON

SECTION II - ICW PROGRAM INFORMATION

5. ICW PROGRAM KEYWORDS / CONCEPTS

6a. TARGET AUDIENCE

b. SPECIALTY CODE(S)	c. SPECIALTY CODE TITLE(S)	d. SKILL LEVEL(S)

7a. OPERATIONAL EQUIPMENT DESIGNATOR	b. OPERATIONAL EQUIPMENT NOMENCLATURE

8. ASSOCIATED COURSE(S)

a. TITLE(S)	b. IDENTIFICATION NUMBER(S)

SECTION III - ICW PROGRAM DESCRIPTION

9a. ICW PROGRAM TITLE	b. ICW PROGRAM ID NUMBER	c. ICW PROGRAM VERSION

d. ICW PROGRAM SUMMARY (Maximum 100 words)

10. ESTIMATED TOTAL HOURS OF INSTRUCTION	11a. NUMBER OF COURSEWARE UNITS

11b. COURSEWARE UNIT NUMBERS	c. COURSEWARE UNIT TITLES

12a. DEVELOPMENT OR ACQUISITION METHOD (Enter appropriate code)

J Joint development or acquisition with another Service / agency   I In-house design and development (with or without contractor support)   C Commercially available off-the-shelf program

E Development or acquisition based on an existing program   O Other (Specify)

b. DITIS RECORD NUMBER OF SHARED PROGRAM

c. USE OF SHARED PROGRAM (Enter appropriate code)

W Parent program used without modification   F Format changes only made to parent program

M Minor changes made to parent program   I Parent program materials only used as inputs to development of current program

C Content changes made to parent program   N/A Not applicable

13a. ICW PROGRAM MATERIALS

b. DELIVERY MEDIUM (Enter appropriate code)	c. DOD RIGHTS TO ICW PROGRAM (Enter appropriate code)
IVD Interactive Videodisc CBI Computer-Based Instruction PTT Part Task Trainer IDD Interactive Digital Disc CDI Compact Disc - Interactive OTH Other (Specify) DVI Digital Video Interactive IVT Interactive Videotape	G Government purpose U Unlimited L Limited O Other (Specify)

DD Form 2568, JAN 91

631/010

SECTION IV - SOFTWARE DESCRIPTION

14. AUTHORING SYSTEM

a. PRODUCT NAME	b. VERSION

c. VENDOR	d. DOD RIGHTS *(Enter appropriate code)*
	G Government purpose U Unlimited L Limited N None
	O Other *(Specify)*

15. OPERATING SYSTEM

a. PRODUCT NAME / VERSION

b. SOFTWARE DRIVERS REQUIRED

16. DOD PORTABILITY STANDARDS VERSION

SECTION V - HARDWARE DESCRIPTION

17. HARDWARE REQUIRED

18a. MINIMUM FREE SYSTEM MEMORY (RAM) REQUIRED	b. CPU TYPE	c. MINIMUM HARD DISK SPACE REQUIRED
19a. FLOPPY DISK TYPE	**b. NUMBER OF FLOPPY DISK DRIVES REQUIRED**	**20. GRAPHICS ADAPTER TYPE REQUIRED**

21. INPUT DEVICE(S)

SECTION VI - MANAGEMENT INFORMATION

22. LIFE CYCLE MANAGEMENT

a. ORGANIZATION NAME	b. OFFICE SYMBOL	
c. POINT OF CONTACT (POC) NAME *(Last, First, Middle Initial)*	d. TELEPHONE NUMBER *(Include Area Code)*	
	(1) Commercial	(2) AUTOVON

23a. SECURITY CLEARANCE REQUIRED *(Enter appropriate code)*	b. RESTRICTIONS TO DISTRIBUTION *(Enter appropriate code)*
U Unclassified O Other *(Specify)* C Confidential S Secret	LR Legal restrictions to public distribution CD Cleared for DoD distribution only NR No legal restrictions to public distribution RD Restrictions to DoD distribution CP Cleared for public exhibition but not distribution NF NOFORN (Not available to foreign nationals) CG Cleared for Government distribution only OT Other *(Specify)*

c.   ADAPTABILITY TO CIVILIAN TRAINING *(Enter appropriate code)*
W   Usable without modification   I   Requires major changes or can only be used   O   Other *(Specify)* M   Requires minor changes   as inputs to civilian training C   Requires content changes   N   Not applicable to civilian training

d. MILITARY ARTICLES AND SERVICES LISTING (MASL) NUMBER	
24a. COURSEWARE DEVELOPER NAME	**b. YEAR DEVELOPED OR LAST UPDATED**

25. DEFENSE AUTOMATED VISUAL INFORMATION SYSTEM (DAVIS) PRODUCT IDENTIFICATION NUMBER(S) (PINs) *(If applicable)*

SECTION VII - CONTINUATION

Use the following space as needed to complete responses to any of the previous items. Precede the continuation to each item with the appropriate item number. If more space is required, attach additional pages, headed with the DITIS Record Number and date in the upper right hand corner.

DD Form 2568 (Back), JAN 91

E5.A2. ATTACHMENT 2 TO ENCLOSURE 5

DEFINITIONS OF DATA ELEMENTS FOR DITIS

SECTION A: ADMINISTRATIVE INFORMATION

This section of the form is to be completed for a proposed development, or any time a DITIS database query is initiated.   The section consists of eight data elements organized into four blocks as follows:

1. Date.   The date this record is forwarded to DITIS.   Entry format is complete year, month, and day (e.g., 22 August 1995 is entered as 19950822).

2. DITIS Record Number.   The alphanumeric tracking number, developed by the originating activity, that is used to identify the ICW program record within the DITIS database.   The number consists of five parts, separated by hyphens, as follows:

C-S-NAME-YYYYMMDD-######, where

C =   One character code to denote the Service of the lead Component for the ICW program

A = Army
F = Air Force
N = Navy
M = Marine Corps
P = Coast Guard
D = Department of Defense
O = Other

S =   One character code to denote the unit status of the activity responsible for the development of the ICW program

R = Active
G = Guard
V = Reserve
O = Other

NAME =   First four letters of the last name of the Service program manager, point-of-contact, or similar individual in the originating activity

YYYYMMDD =   The date on which data regarding this program are first entered into the DITIS.   Entry format is complete year, month, and day.   (E.g., 19950822.)

=   A unique six digit number

3. <u>ICW Program Status</u>.   Code to denote the current phase of the program for which data are being submitted to DITIS:

> Q - Query only
> P - Proposed development
> U - Under development
> C - Development or acquisition completed
> R - Program revision
> S - Out of service
> T - Program terminated
> O - Other (specify)

4a. <u>Originating Activity Organization Name</u>.   The full name of the Government activity responsible for the development of the ICW program (e.g., Chief of Naval Education and Training; USA Training and Doctrine Command; USAF Air Training Command).   If the current data entry is part of a query, the full name of the Government activity requesting the data search.

4b. <u>Originating Activity Office Symbol</u>.   The full office symbol of the Government activity responsible for the development of the ICW program (e.g., CNET, Program Management Support Activity, Code 0474; HQ TRADOC Attn: ATTG-C1; HQ ATC/TTOR).   If the current data entry is part of a query, the full office symbol of the Government activity requesting the data search.

4c. <u>Originating Activity Point-of-Contact (POC) Name</u>.   The name and title of the person at the originating activity who is most knowledgeable about the program content and features.

4d. <u>Originating Activity Telephone</u>

(1) <u>Commercial</u>.   The commercial telephone number, including area code, of the originating activity (e.g., (407) 555-1234).

(2) <u>AUTOVON</u>.   The AUTOVON telephone number of the originating activity.

<u>SECTION B: ICW PROGRAM INFORMATION</u>

This section of the form is to be completed for a proposed development, or any time a

DITIS database query is initiated.   The section consists of eight data elements organized into four blocks, and is used as the basis of the DITIS database search for comparable products.   The data elements are as follows:

5. ICW Program Key Words and/or Concepts.   A list of up to 10 key words or concepts--separated by commas--that describes the general training area supported by the ICW program (e.g., aircraft, radar, maintenance, troubleshooting fault isolation, repair).   NOTE: These terms will be the key concepts that are used to search the database for comparable products.

6a. Target Audience.   A general description of the intended trainee population who will use the ICW program (e.g., all aircraft maintenance personnel; advanced sonar technicians; E-9 load masters).

6b. Specialty Code(s).   The specific specialty codes (i.e., Navy = NEC, Army/Marine Corps = MOS, Air Force = AFSC) of the target audience for which the ICW program was designed (e.g., 305X4).   If the ICW program is not targeted at a specific occupational specialty or group, enter N/A for "not applicable."   NOTE: This item will be included in the key concepts that are used to search the database for comparable products.

6c. Specialty Code Title(s).   The corresponding titles of the occupational specialty code(s) listed in Item 6b (e.g., Electronic Computer & Switching Systems Specialist).   NOTE: These terms will be included in the key concepts that are used to search the database for comparable products.

6d. Skill Level(s).   For each of the specialty codes listed in Item 6b, list the target skill level(s) to which the ICW program was written.   If the program is targeted at more than one skill level, list the appropriate ones, separated by commas (e.g., 3, 5, 7).   If the program is appropriate for all skill levels within a specialty code, enter the word "all."   NOTE: This item will be included in the key concepts that are used to search the database for comparable products.

7a. Operational Equipment Designator.   The short title of the DoD designator of the operational equipment supported by the ICW program (e.g., F-14A; AN/ANQ-64) and/or the primary associated support equipment (e.g., oscilloscope) covered by the program.   If the ICW program does not deal with a piece of equipment, enter N/A for "not applicable."   NOTE: These terms will be included in the key concepts that are used to search the database for comparable products.

7b. <u>Operational Equipment Nomenclature</u>.   The complete nomenclature of the DoD designator of the operational equipment supported by the ICW program (e.g., F-14 Fighter Aircraft; AN/ANQ-64 Radar Fire-Fighter Close Support), and/or the primary associated non-generic support equipment covered by the program.   If the ICW program does not deal with a piece of equipment, enter N/A for "not applicable."   NOTE: These terms will be included in the key concepts that are used to search the database for comparable products.

8a. <u>Associated Course Title(s)</u>.   The Service- or Agency-assigned title(s) of the training course(s) that the ICW program supports (e.g., AT&T 3B15 Computer Maintenance).   If the ICW program does not support a specific course, enter N/A for "not applicable."

8b. <u>Associated Course Identification Number(s)</u>.   The Service- or Agency-assigned course identification number of the training course(s) that the ICW program supports (e.g., ES-37O).   If the ICW program is used to support on-the-job, enter OJT.

SECTION C: ICW PROGRAM DESCRIPTION

This section of the form is to be completed within 30 days following Component-approval to develop or fund the ICW program procurement.   The section consists of 12 data elements organized into five blocks as follows:

9a. <u>ICW Program Title</u>.   The Service- or Agency-approved name of the ICW program.

9b. <u>ICW Program Identification Number</u>.   The Service- or Agency-approved identification number of the ICW program.

9c. <u>ICW Program Version</u>.   The version number and/or date of the latest update of the ICW program.

9d. <u>ICW Program Summary</u>.   A brief narrative description (maximum 100 words) of the instructional contents of the ICW program.

10. <u>Estimated Total Hours of Instruction</u>.   The projected average contact hours necessary for a trainee to complete the ICW program.   Entry format is hours:minutes (e.g., a course that averages 4 hours and 15 minutes to complete is entered as 04:15).

11a. <u>Number of Courseware Units</u>.   The total number of discrete units of courseware (i.e., lessons or modules) contained in the ICW program that can be taught, measured, and evaluated as a single unit.

11b. <u>Courseware Unit Numbers</u>.   The corresponding identification number for each courseware unite in the ICW program.   If the ICW program contains only one unit, enter N/A for "not applicable."

11c. <u>Courseware Unit Titles</u>.   The full title of each courseware unit contained within the ICW program.   If the courseware units do not have descriptive titles, enter a short description of the contents of the unit (e.g., Rules of the Road; Oscilloscope Use.)   If the ICW program contains only one unit, enter N/A for "not applicable."

12a. <u>Development or Acquisition Method</u>.   Code to denote the method by which the ICW program has been acquired or developed:

>J - Joint development or acquisition with another Service or Agency
>E - Development or acquisition based on an existing program
>I - In-house design and development (with or without contractor support)
>C - Commercially available off-the-shelf program
>O - Other (specify)

12b. <u>DITIS Record Number of Shared Program</u>.   The DITIS record number of the ICW program of the other Service or Agency if the current program is shared with another Service or Agency or is based on ICW program materials received from another Service or Agency (i.e., if the answer to Item 12a is "J" or "E").   If this item is not applicable to the current ICW program, enter N/A.

12c. <u>Use of Shared Program</u>.   Code to denote the extent to which the materials of the shared program are used in the current ICW program.   (If this item is not applicable to the current program, enter N/A.)

>W - Shared program used without modification
>M - Minor changes made to shared program (e.g., title change, additional credits)
>C - Content changes made to shared program (e.g., video reshot, additions or deletions made to instructional content)
>F - Format changes only made to shared program (e.g., different presentation medium used)
>I - Shared program materials only used as inputs to the development of the

current program

13a. <u>ICW Program Materials</u>.   A list of all training materials used to support the objectives of the ICW program.   Include all plans; control documents; disks, tapes, books, job performance aids, and other support materials; and instructor guides and other user documentation (e.g., 1 compact disc, 2 floppy disks, instructor guide, trainee workbook).

13b. <u>Delivery Medium</u>.   Code to denote the primary type of technology used by the ICW program to present information to the trainee.

> IVD - Interactive Videodisc
> IDD - Interactive Digital Disc
> DVI - Digital Video Interactive
> IVT - Interactive Videotape
> PTT - Part Task Trainer
> OTH - Other (specify)

13c. <u>DoD Rights to ICW Program</u>.   Code that denotes the type of rights (per the Federal Acquisition Regulation) that are owned by the Department of Defense for the ICW program:

> U - Unlimited
> G - Government-purpose
> L - Limited
> O - Other (specify)

SECTION D: SOFTWARE DESCRIPTION

This section of the form is to be completed within 30 days following completion of ICW program development or acquisition.   The section consists of seven data elements organized into two blocks as follows:

14a. <u>Authoring System Product Name</u>:   The official product name or trademark of the authoring system, assembly language, or higher order language (HOL) used to develop the ICW program courseware (e.g., Instructional Support System (ISS)).

l4b. <u>Authoring System Version</u>:   The version number and/or date of the authoring system, assembly language, or higher order language (HOL) compiler used to develop the ICW program courseware (e.g., Version 2.1, December 1989).   If the

courseware was developed using a HOL, state the compiler version.

l4c. Authoring System Vendor: The full name and acronym (if appropriate) of the commercial, academic, or Government developer of the ICW authoring system, assembly language, or higher order language (HOL) used to develop the ICW program courseware.

14d. DoD Rights to Developmental Authoring System: Code that denotes the type of rights (per the Federal Acquisition Regulation) that are owned by the Department of Defense to the developmental portion of the authoring system used to develop the ICW program.

> U - Unlimited
> G - Government-purpose
> L - Limited
> N - None
> O - Other (specify)

15a. Operating System Product Name and Version: The official product name or trademark, including vendor and version, of the computer operating system software used by the ICW program (e.g., Microsoft DOS 4.0).

15b. Operating System Software Drivers Required: A list of any special software drivers that are required to run the ICW program, but that are not included as part of the training materials (e.g., mouse driver, ANSI.SYS, CD-ROM extensions).   If no additional software drivers are required, enter N/A for "not applicable."

16. DoD Portability Standards Version: The version number of the portability standards in MIL-STD-1379D used in the development of the ICW courseware.   If the courseware was developed before the initial issuance of MIL-H-1379D, enter N/A for "not applicable."

 SECTION E: HARDWARE DESCRIPTION

This section of the form is to be completed within 30 days following completion of ICW program development or acquisition.   The section consists of eight data elements organized into five blocks as follows:

17. Hardware Required: A list of the official product names or trade-marks that uniquely identify each of the hardware components and peripherals required to run the

ICW program (e.g., XYZ Model 201 videodisc player; RPQ Model 6012 CD-ROM interface card).

18a. <u>Minimum Free System Random Access Memory (RAM) Required</u>:   The minimum amount of unused memory (RAM) that must be available on the system to run the ICW program (e.g., 425K).

18b. <u>CPU Type</u>:   Type of CPU for which the ICW program was designed (e.g., 8086, 8286, 68000).

18c. <u>Minimum Hard Disk Space Required</u>:   If the ICW program requires the use of a hard disk drive, the minimum storage space that must be available on the hard disk drive to run the ICW program (e.g., 2.8 MB).

19a. <u>Floppy Disk Type</u>:   If the ICW program requires the use of floppy disks, the physical size and capacity of the floppy disks for which the ICW program was designed (e.g., 3.5 inch, 720 K; 5.25 inch, 360 K).   If the ICW program does not require the use of floppy disks, enter N/A for "not applicable."

19b. <u>Number of Floppy Disk Drives Required</u>:   If the ICW program requires the use of floppy disks, the number of floppy disk drives necessary to run the program (e.g., 2).   If the ICW program does not require the use of floppy disks, enter N/A for "not applicable."

20. <u>Graphics Adapter Type Required</u>:   The type of graphics adapter board that must be installed in the system to run the ICW program (e.g., VGA).

21. <u>Input Device(s)</u>:   A list of all input devices that the ICW program was designed to use (e.g., keyboard, mouse).

SECTION F: MANAGEMENT INFORMATION

This section of the form is to be completed within 30 days following completion of ICW program development or acquisition.   The section consists of ten data elements organized into four blocks as follows:

22a. <u>Life-Cycle Management Organization Name</u>.   The full name of the activity responsible for the life-cycle management of the ICW program, as designated by the Component (e.g., Chief of Naval Education and Training; USA Training and Doctrine Command; USAF Air Training Command).

22b. <u>Life-Cycle Management Office Symbol</u>.   The full office symbol of the activity responsible for the life-cycle management of the ICW program, as designated by the Component (e.g., CNET, Program Management Support Activity, Code 0474; HQ TRADOC Attn: ATTG-C1; HQ ATC/TTOR).

22c. <u>Life-Cycle Management Point-of-Contact (POC) Name</u>.   The name and title of the person designated by the Component to be the life-cycle manager for the ICW program.

22d. <u>Life-Cycle Management Telephone</u>

 (1) <u>Commercial</u>.   The commercial telephone number, including area code, of the life-cycle manager for the ICW program (e.g., (407) 555-1234).

 (2) <u>AUTOVON</u>.   The AUTOVON telephone number of the life-cycle manager for the ICW program.

23a. <u>Security Clearance Required</u>.   Code that denotes the clearance level required for an individual to view or discuss the ICW program:

 U - Unclassified
 C - Confidential
 S - Secret
 O - Other (specify)

23b. <u>Restrictions to Distribution</u>.   Code that denotes the release status of the ICW program, based on the content of the program materials:

 LR - Legal restrictions to public distribution
 NR - No legal restriction to public distribution
 CP - Cleared for public exhibition but not distribution
 CG - Cleared for Government distribution only
 CD - Cleared for DoD distribution only
 RD - Restrictions to DoD distribution
 NF - NOFORN (i.e., not available to foreign nationals)
 OT - Other (specify)

23c. <u>Adaptability to Civilian Training</u>.   Code to denote the ease with which the ICW program can be adapted for use in training in the civilian sector.

W - Usable without modification

M - Requires minor changes (e.g., title change, additional credits)

C - Requires content changes (e.g., video reshot, additions or deletions to instructional content)

I - Requires major changes or can only be used as inputs to development of civilian training

N - Not applicable to civilian training

O - Other (specify)

23d. <u>Military Articles and Services Listing (MASL) Number</u>.   If the ICW program is available for the Military Assistance Program, enter the Military Articles and Services Listing (MASL) number assigned by the Component.   If the ICW program is not available for the Military Assistance Program, enter N/A for "not applicable."

24a. <u>Courseware Developer Name</u>.   The full name and acronym (if appropriate) of the contractor or Government Agency responsible for developing the ICW program courseware (e.g., Chief of Naval Education and Training (CNET); USA Training and Doctrine Command (TRADOC); USAF Air Training Command (ATC)).   If the ICW program is a joint-development effort between a DoD Agency or Service and a contractor, enter the name of the contractor.

24b. <u>Year Developed or Last Updated</u>.   The full calendar year that the ICW program was developed or, if the program has since been updated, the full calendar of the latest revision.   This data element applies only if this is the record of a currently fielded program that has not previously been entered into the DITIS database; otherwise, enter N/A for "not applicable."

25. <u>Defense Automated Visual Information System (DAVIS) Production Identification Number(s) (PINs)</u>:   The PIN(s) assigned to the ICW program by DAVIS, if the ICW program contains video.   If the ICW program does not contain video, enter N/A for "not applicable."